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EXAMINER

CHANKONG, DOHM

ART UNIT PAPER NUMBER

2152

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/021,771

Applicant(s)

TEWARI ET AL.

Examiner

Dohm Chankong

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 4, 6-13, 15 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 6-13, 15 and 17-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

- 1> This action is in response to Applicant's amendment and remarks. Claims 3, 5, 14, and 16 have been cancelled. Claims 1, 2, 4, 6-13, 15 and 17-20 are presented for further examination.
- 2> This action is a final rejection.

### *Response to Arguments*

- 3> Applicant's arguments filed 4.13.2005 have been fully considered but they are not persuasive.

Applicant is arguing in substance that the prior art references do not teach or disclose utilizing the telnet protocol as is now present in amended claim 1 (from cancelled claim 5). Applicant asserts that the Jones reference does not disclose "...using the Telnet protocol to logon to the device and submit commands to the device...". And since Jones does not disclose submitting commands to the device, Jones also does not disclose "...determining the attributes of the video device by reference to command responses from the video device." [Applicant's remarks, pages 10-11]. Applicant supports his assertions because Jones states that information is sent to the client computer without the client computer having to provide any Login identification details which essentially means that the client computer only has to connect to the Telnet server port.

This section in Jones only relates to the fact that the client (management) computer does not need to provide log-in credentials to the remote device to connect to the Telnet port of the device and does not apply to the transfer of the Login banner information. If we were

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to apply Applicant's arguments to Jones, we would have to assume that after the client computer connects to the remote device through Telnet, the Login banner (with the device information) immediately and with no further action from the client computer is transferred from the remote device. Examiner believes this situation to be unlikely because it is counter-intuitive to the nature of Telnet; as is well known in the art, Telnet protocol is essentially a command-based program ["get", "send", "open", etc...]. The client computer if it were to connect to the Telnet server port of the remote device cannot be passive; it is inherent to Telnet that communications (commands) transpire between to the connected devices. Therefore, while not explicitly disclosed by Jones, commands between the client computer and remote device are inherent in regards to the transfer of the Login banner from the remote device because Telnet is involved and consequently, the Login banner sent by the remote device to the client computer is comparable to a command response claimed in claim 1.

4> It is the Examiner's position that Applicant has not yet submitted claims drawn to limitations which define the operation and apparatus of Applicant's disclosed invention in a manner that distinguishes over the prior art.

*Claim Rejections - 35 USC § 103*

5> The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6> Claims 1, 9-12 and 20 are rejected under 35 U.S.C § 103(a) as being unpatentable over Mastrianni, U.S Patent Publication No. 2002/0099814 A1, in view of Jones.

7> As to claim 1, Mastrianni discloses a method of discovering devices in a video network, the method comprising:

determining whether a device in the video network supports a first network protocol [Figure 3 «item 501» | 0051];

in response to determining that the device supports the first network protocol, automatically using the first network protocol to retrieve attributes of the device from the video device [Figure 3 «item 502» | 0058];

in response to determining that the device does not support the first network protocol, automatically determining whether the device supports a second network protocol [Figure 3 «item 504»];

in response to determining that the device supports the second network protocol, automatically using the second network protocol to retrieve the attributes of the device from the device [Figure 3 «item 505» | 0058, 0060];

in response to determining that the video device does not support the second network protocol, automatically determining whether the video device supports one or more other network protocols [Figure 3 «items 507, 510, 513»]; and

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in response to determining that the video device supports another network protocol, automatically using that supported network protocol to retrieve the attributes of the video device from the video device [Figure 3 «items 508, 511, 514»].

Mastrianni does not specifically disclose discovering video devices or that the one or more other network protocols comprise a Telnet protocol; the operation of automatically using the supported network protocol to retrieve the attributes of the video device comprises:

using the Telnet protocol to logon to the device and submit commands to the device;  
and

determining the attributes of the video device by reference to command responses from the video device..

8> Jones discloses discovering video devices [column 3 «lines 4-18» | column 58-62» where: the workstations and their monitors are analogous to video devices]. As Mastrianni suggests that his device discovery method can locate and describe all sorts of peripherals [0057], one of ordinary skill in the art could have reasonably inferred incorporating video devices, such as the devices suggested by Jones, into Mastrianni's device discovery method. One would have been motivated to perform such an implementation to increase the functionality of Mastrianni's method by allowing the discovery of a wider variety of devices that are connected to the network.

Additionally, Jones discloses a method, wherein:

the one or more other network protocols comprise a Telnet protocol [column 3 «lines 18-21»]; and

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the operation of automatically using the supported network protocol to retrieve the attributes of the video device comprises:

using the Telnet protocol to logon to the device and submit commands to the device [column 3 «lines 18-33»]; and

determining the attributes of the video device by reference to command responses from the video device [column 3 «lines 55-62»].

It would have been obvious to one of ordinary skill in the art to further incorporate Jones' use of Telnet into Mastrianni's device discovery system. One would have been motivated to perform such an implementation to increase the functionality of Mastrianni's system by enabling means for discovering a wider variety of protocols in network devices.

9> As to claim 9, Mastrianni discloses the method of claim 1, further comprising, in response to retrieving the attributes of the video device, repeating one or more of the operations for determining a supported network protocol to retrieve attributes of additional video devices [Figure 3 | 0058].

10> As to claim 10, Mastrianni discloses a network management system (NMS) that automatically discovers devices in a video network, the NMS comprising:

a communications interface in communication with the devices [0052];

memory that encodes computer instructions [0052]; and

a processor in communication with the communications interface and the

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memory, wherein the computer instructions, when executed by the processor [0051, 0052, 0053, 055], cause the NMS to perform operations comprising:

- determining whether a device in the video network supports a first network protocol [Figure 3 «item 501» | 0051];

- in response to determining that the device supports the first network protocol, automatically using the first network protocol to retrieve attributes of the device from the video device [Figure 3 «item 502» | 0058];

- in response to determining that the device does not support the first network protocol, automatically determining whether the device supports a second network protocol [Figure 3 «item 504»];

- in response to determining that the device supports the second network protocol, automatically using the second network protocol to retrieve the attributes of the device from the device [Figure 3 «item 505» | 0058, 0060];

- in response to determining that the video device does not support the second network protocol, automatically determining whether the video device supports one or more other network protocols [Figure 3 «items 507, 510, 513»]; and

- in response to determining that the video device supports another network protocol, automatically using that supported network protocol to retrieve the attributes of the video device from the video device [Figure 3 «items 508, 511, 514»].

Mastrianni does not specifically disclose discovering video devices or that the one or more other network protocols comprise a Telnet protocol; the operation of automatically using the supported network protocol to retrieve the attributes of the video device comprises:



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using the Telnet protocol to logon to the device and submit commands to the device;  
and  
determining the attributes of the video device by reference to command responses  
from the video device..

11> Jones discloses discovering video devices [column 3 «lines 4-18» | column 58-62»  
where: the workstations and their monitors are analogous to video devices]. As Mastrianni  
suggests that his device discovery method can locate and describe all sorts of peripherals  
[0057], one of ordinary skill in the art could have reasonably inferred incorporating video  
devices, such as the devices suggested by Jones, into Mastrianni's device discovery method.  
One would have been motivated to perform such an implementation to increase the  
functionality of Mastrianni's method by allowing the discovery of a wider variety of devices  
that are connected to the network.

Additionally, Jones discloses a method, wherein:

the one or more other network protocols comprise a Telnet protocol [column 3  
«lines 18-21»]; and

the operation of automatically using the supported network protocol to  
retrieve the attributes of the video device comprises:

using the Telnet protocol to logon to the device and submit commands to the  
device [column 3 «lines 18-33»]; and

determining the attributes of the video device by reference to command  
responses from the video device [column 3 «lines 55-62»].

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It would have been obvious to one of ordinary skill in the art to further incorporate Jones' use of Telnet into Mastrianni's device discovery system. One would have been motivated to perform such an implementation to increase the functionality of Mastrianni's system by enabling means for discovering a wider variety of protocols in network devices.

12> As to claim 11, Mastrianni discloses a video network comprising:

an NMS according to claim 10 [see above paragraph];

a first endpoint in communication with the NMS, wherein the first endpoint supports the first network protocol and the NMS automatically uses the first network protocol to retrieve device attributes from the first endpoint [0056-0067]; and

a second endpoint in communication with the NMS, wherein the second endpoint supports the second network protocol and the NMS automatically uses the second network protocol to retrieve device attributes from the second endpoint [0056-0067].

13> As to claim 12, Mastrianni discloses a program product for discovering video devices in a video network, the program product comprising:

a computer-usable medium [0051]; and

computer instructions encoded in the computer-usable medium, wherein the computer instructions, when executed, cause a data processing system to perform operations [0051], comprising:

the steps of claim 1 [see rejection for claim 1, supra].

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14> As to claim 20, as it is merely a program product that perform the steps of the method of claim 9, it does not teach or further define over the limitations of claim 9. Therefore, claim 20 is rejected for similar reasons set forth for claim 9, supra.

15> Claims 2, 4, 7, 13, 15 and 18 are rejected under 35 U.S.C § 103(a) as being unpatentable over Mastrianni, in view of Jones, in further view of Hemphill et al, U.S Patent No. 6,490,617 ["Hemphill"].

16> As to claim 2, Mastrianni does not specifically disclose a method wherein:  
the first network protocol comprises a Simple Network Management Protocol (SNMP); and  
the second network protocol comprises a Hypertext Transfer Protocol (HTTP).

17> Jones discloses a device discovery method utilizing the network protocol SNMP to discover information about devices in the network [column 4 «lines 16-24»]. Since Mastrianni does suggest utilizing additional network configuration protocol discovery methods as well as executing the network protocol discovery in any order [0084], it would have been obvious to one of ordinary skill in the art to have incorporated SNMP as a network discovery protocol into Mastrianni's sequential protocol discovery method. One would have been motivated to perform such an implementation to increase Mastrianni's functionality by utilizing SNMP, a ubiquitous protocol used to discover devices in a network.

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18> Hemphill discloses a device discovery method utilizing the network protocol HTTP to discover information about devices in the network [abstract | column 2 «lines 46-62»]. Since Mastrianni does suggest utilizing additional network configuration protocol discovery methods as well as executing the network protocol discovery in any order [0084], it would have been obvious to one of ordinary skill in the art to have incorporated HTTP as a network discovery protocol into Mastrianni's sequential protocol discovery method. One would have been motivated to perform such an implementation to increase Mastrianni's functionality by utilizing HTTP to discover a wider variety of devices, as taught by Hemphill.

19> As to claim 4, Mastrianni does not specifically disclose a method wherein:  
the first network protocol comprises a Simple Network Management Protocol (SNMP);  
the second network protocol comprises a Hypertext Transfer Protocol (HTTP); and  
the one or more network protocols comprise a terminal emulation protocol.

20> Jones discloses a device discovery method utilizing the network protocol SNMP and a terminal emulation protocol to discover information about devices in the network [column 3 «lines 38-49» | column 4 «lines 16-42»]. Since Mastrianni does suggest utilizing additional network configuration protocol discovery methods as well as executing the network protocol discovery in any order [0084], it would have been obvious to one of ordinary skill in the art

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to have incorporated SNMP and a terminal emulation protocol as network discovery protocols into Mastrianni's sequential protocol discovery method. One would have been motivated to perform such an implementation to increase Mastrianni's functionality by utilizing SNMP and a terminal emulation protocol to discover a wider variety of devices, as taught by Jones.

21> Hemphill discloses a device discovery method utilizing the network protocol HTTP to discover information about devices in the network [abstract | column 2 «lines 46-62»].

Since Mastrianni does suggest utilizing additional network configuration protocol discovery methods as well as executing the network protocol discovery in any order [0084], it would have been obvious to one of ordinary skill in the art to have incorporated HTTP as a network discovery protocol into Mastrianni's sequential protocol discovery method. One would have been motivated to perform such an implementation to increase Mastrianni's functionality by utilizing HTTP to discover devices as taught by Hemphill.

22> As to claim 7, Mastrianni does not explicitly disclose a method wherein:

the operation of automatically using the first network protocol to retrieve the attributes of the video device comprises using a Simple Network Management Protocol (SNMP) to retrieve information from an agent of the video device; and

the operation of automatically using the second network protocol to retrieve the attributes of the video comprises:

using a Hypertext Transfer Protocol (HTTP) to retrieve a page from the video device; and

determining the attributes of the video device by reference to the page.

23> Jones discloses a device discovery method utilizing the operation of automatically using the first network protocol to retrieve the attributes of the video device comprises using a Simple Network Management Protocol (SNMP) to retrieve information from an agent of the video device [column 4 «lines 16-24»]. Since Mastrianni does suggest utilizing additional network configuration protocol discovery methods as well as executing the network protocol discovery in any order [0084], it would have been obvious to one of ordinary skill in the art to have incorporated SNMP as a network discovery protocol into Mastrianni's sequential protocol discovery method. One would have been motivated to perform such an implementation to increase Mastrianni's functionality by utilizing SNMP, a ubiquitous protocol used to discover devices in a network.

24> Hemphill discloses a device discovery method utilizing the operation of automatically using the second network protocol to retrieve the attributes of the video comprises:

using a Hypertext Transfer Protocol (HTTP) to retrieve a page from the video device [abstract | column 9 «lines 55-60»]; and

determining the attributes of the video device by reference to the page [abstract | column 10 «lines 45-55»]. Since Mastrianni does suggest utilizing additional network configuration protocol discovery methods as well as executing the network protocol

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discovery in any order [0084], it would have been obvious to one of ordinary skill in the art to have incorporated HTTP as a network discovery protocol into Mastrianni's sequential protocol discovery method. One would have been motivated to perform such an implementation to increase Mastrianni's functionality by utilizing HTTP to discover devices by reading a page obtained from the user device, as taught by Hemphill.

25> As to claims 13, 15 and 18, as they are merely program products that perform the steps of the methods of claims 2, 4 and 7, respectively, they do not teach or further define over the limitations. Therefore, claims 13, 15 and 18 are rejected for similar reasons set forth for claims 2, 4 and 7, supra.

26> Claims 6 and 17 are rejected under 35 U.S.C § 103(a) as being unpatentable over Mastrianni, Jones and Hemphill, in further view of Broulik et al, U.S Patent No. 6,323,881 ["Broulik"].

27> As to claim 6, Mastrianni does not disclose a method wherein the one or more other network protocols comprise a VT-100 protocol.

28> Jones discloses a method wherein another network protocol is a Telnet protocol [column 2 «lines 24-29»]. While Jones does not explicitly disclose VT-100 protocol, it is well known in the art that Telnet applications are based on VT-100. For example, see Broulik [column 1 «lines 25-41»]. Therefore, one of ordinary skill in the art, based on the Jones

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reference, would have reasonably inferred utilizing a VT-100 based protocol to take advantage of the telnet applications taught by Jones. And since Mastrianni does suggest utilizing additional network configuration protocol discovery methods as well as executing the network protocol discovery in any order [0084], it would have been obvious to one of ordinary skill in the art to have incorporated Telnet (VT-100 based) as a network discovery protocol into Mastrianni's sequential protocol discovery method. One would have been motivated to perform such an implementation to increase Mastrianni's functionality by utilizing Telnet to discover devices as suggested by Jones.

29> As to claim 17, as it is merely a program product that perform the steps of the method of claim 6, it does not teach or further define over the limitations. Therefore, claim 17 is rejected for similar reasons set forth for claim 6, supra.

30> Claims 8 and 19 are rejected under 35 U.S.C § 103(a) as being unpatentable over Mastrianni, in view of Banginwar, U.S Patent No. 6.611.863.

31> Mastrianni discloses a method further comprising transmitting a sequence of queries to the video device to identify a messaging technique for obtaining the attributes of the video device [abstract | 0044, 0080] but does not disclose that the sequence of queries includes a first query adapted to communicate with equipment from a first vendor and a second query adapted to communicate with equipment from a second vendor.



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32> Banginwar discloses a sequence of queries includes a first query adapted to communicate with equipment from a first vendor and a second query adapted to communicate with equipment from a second vendor [column 3 «lines 47-67» | column 4 «lines 22-29»]. It would have been obvious to one of ordinary skill in the art to incorporate Banginwar's manufacturer-specific query system into Mastrianni's device discovery system so that messages to the device are properly adapted to communicate with devices from certain manufacturers.

33> As to claim 19, as it is merely a program product that perform the steps of the method of claim 8, it does not teach or further define over the limitations. Therefore, claim 19 is rejected for similar reasons set forth for claim 8, supra.

### *Conclusion*

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

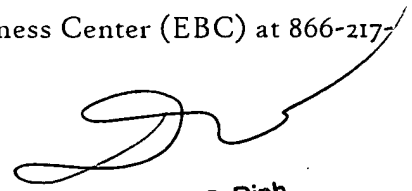
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advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dohm Chankong whose telephone number is (571)272-3942. The examiner can normally be reached on 8:30AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (571)272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dung C. Dinh  
Primary Examiner

DC